

Listed as received in Gard-Chron. Jan. 11. 1862

11

1861.

CATALOGUE

OF

HYMENOPHYLLUMS

AND

TRICHOMANES.

J. BACKHOUSE & SON,

YORK.

to recognize their surpassing elegance and delicate beauty. Both in form and texture they are the *gems* of the Fern tribe.

The descriptions given are not intended to be *scientifically complete*, but to give a good general idea of each kind.

Where the term "*pinnate*" is used, the fern is divided quite down to the midrib. Where "*pinnatifid*" is used, there is a *membranaceous margin or wing* to the midrib, or main rachis. Where a fern is described as "*thrice divided (pinnate)*," it means that the main stem or central rachis has *no* winged margin, but that the midrib of the branches and branchlets *is* winged. "*Twice divided (bipinnatifid)*," or "*thrice divided (tripinnatifid)*," means that the fern has *all* the midribs *winged*, whether divided two or three times. Where "*highly divided*" is used, the fern is either four times pinnatifid, or *once* pinnate and *three* times pinnatifid, or twice pinnate and twice pinnatifid, &c.

All the kinds enumerated in the Catalogue are in our possession as *living* plants. Three kinds, now alive, are so feeble as to render their ultimately *growing* somewhat doubtful, but of all these we expect fresh supplies in the course of next season. One or two other species *not named*, are alive with us, and likely to grow freely, but as yet too small to determine certainly.

PRICES ON APPLICATION.

JAS. BACKHOUSE, and SON.

YORK, 11th Mo., 1861.

FILMY FERNS.

(*Hymenophyllum* and *Trichomanes*.)

HYMENOPHYLLUM.

abruptum (Hook.) A small fern ($1\frac{1}{2}$ to 2 inches,) densely carpeting mossy trunks and rocks, in the *West Indies*, with broad, blunt, glossy, once divided (*pinnatifid*),* curving fronds, on wiry stalks. Likes a humid and rather shady position, but not a confined atmosphere. 50° to 70° temperature.†

æuginosum (Carm.) A well marked species from *New Zealand*, with ovate, dense, thrice divided (*tripinnatifid*), fronds, 4 to 8 inches long, clothed with minute white or tawny pubescence. Pendent from rocks and trunks of trees. Humid and rather close atmosphere. Water freely, but not much over the fronds. 40° to 65° .

asplenioides (Sw) A delicate and pretty fern, with narrow, glossy, slightly divided (*pinnatifid*), wiry stemmed fronds, 2 to 5 inches long; pendent from mossy rocks or trunks in the *West Indies*. Very humid, but rather airy. Water freely. 55° to 75° .

* See Explanatory Remarks.

† The first figure indicates the winter temperature.

H. blepharodes (Pr.)? Another pendent species from the *West Indies*, with broad, attenuated, dense, twice or thrice divided (*bi-tri-pinnatifid*) fronds, toothed at the margin, and 3 to 5 inches long. Very humid, but rather airy. 50° to 70°.

caudiculatum (Mart.) A very handsome species from *Chili*, with erect, smooth, thrice divided (*tripinnatifid*), translucent fronds, 9 to 15 inches high. Stem broadly winged. Among decaying vegetable matter, or on mossy trees. Very humid and rather close. 40° to 65°.

Chiloense (Hook.) A small pendent species, densely carpeting rocks and trees in *Southern Chili*. Fronds broad at the base, dense, dull green, twice or thrice divided (*sub-tri-pinnatifid*.) Very humid. 40° to 65°.

ciliatum (Sw.) Similar to the last in habit, but more than double the size, and hairy throughout, especially at the edges of the broadly ovate, dense, *bi-tri-pinnatifid* fronds. Stalks short, broadly winged to the base. *West Indies*. Very humid, but rather airy. 50° to 75°.

crispatum (Hook.) A pretty species, 5 to 7 inches high, clothing the trunks of Tree-ferns, &c., in *Tasmania* and *New Zealand* with broad, erect or curving, smooth, deep green, rather dense, thrice divided (*tri-pinnatifid*), crisped fronds, on winged stalks. Very humid, but airy. 40° to 65°.

cruentum (Cav.) An extremely distinct and charming fern (6 to 12 inches) from *Southern Chili*; with broad, *undivided*, sea-weed like curving fronds, waved at the edges, translucent, and beautifully veined. Brownish rose colour when young. Stalks long and wiry. Pendent from trees. Very humid, and rather shady. 40° to 65°.

demissum (Sw.) A very handsome species, 12 to 18 inches high, from *New Zealand*, with thrice divided (*tri-pinnatifid*) smooth fronds, on tall erect wiry stalks. Humid but airy. 40° to 65°.

H. dichotomum (Cav.) A beautifully crisped and transparent species, 4 to 6 inches high, from *Chili*, with broad and highly divided (*3-4-pinnatifid*) fronds, sharply toothed or torn at the edges; on erect winged stalks. On mossy trees. Very humid and shady. 40° to 65°.

dilatatum (Sw.) One of the largest and most beautiful of this charming genus, growing among moss and decaying vegetable matter in *New Zealand*. Fronds 14 to 20 inches high, broad, pale green, thrice divided (*tri-pinnatifid*), with attenuated and gracefully drooping segments. Stalks erect, winged. Very humid, shady and rather close. 40° to 65°.

flabellatum (Labill.) A lovely fern from *Tasmania*, with dense, glistening, twice divided (*pinnate*) fronds, 6 to 12 inches long. Pendent from the trunks of tree-ferns, &c. Very humid but airy. 40° to 65°.

flexuosum (A. Cunn.) Closely allied to *H. crispatum*, but differs in having larger and more divided fronds, which are everywhere beautifully crisped and undulated. *New Zealand*. Very humid. 40° to 65°.

fuciforme (Sw.) A truly magnificent species from *Southern Chili*, with broad, erect, thrice divided (*tri-pinnatifid*), bluish green, smooth fronds, 1½ to 2½ feet high! On rigid winged stalks. Very humid, but rather airy. 40° to 65°.

hirsutum (Sw.) An extremely delicate little fern, with narrow twice divided, transparent fronds, 3 to 9 inches long, clothed with soft white or tawny hairs. Pendent from the trunks of trees in the *West Indies*. Very humid, but airy, and no water on the fronds. 55° to 80°.

hirtellum (Sw.) A delicate and pretty species, with broad, attenuated, rather open, thrice divided (*tri-pinnatifid*), pale green drooping fronds, 6 to 12 inches long, everywhere clothed with soft white, or tawny hairs. Stalks erect, round. *Jamaica*. Very humid, but airy. 50° to 80°.

H. nudum (Desv.)? A small fern from the *West Indies*, with erect, broad, three or four times divided (*bipinnate*) fronds, $1\frac{1}{2}$ to 3 inches high, fringed with hairs. Stalks round, hairy. Very humid, airy. 50° to 75° .

Plumieri (Hook and Grev.) Closely allied to *H. ciliatum*, and perhaps not specifically distinct. Differs in its larger fronds, and more remote, but less deeply cut pinnæ. *West Indies*. Very humid, but airy. 55° to 80° .

polyanthos (Sw.) A pretty fern, 4 to 10 inches high, from the *West Indies* and *New Zealand*, with erect or curving, thrice divided (*tripinnatifid*), smooth and dark green fronds, on wiry stalks. Humid, but airy. Becomes unhealthy when *confined* under a glass. 40° to 70° .

pulcherrimum (Col.) An erect and handsome species, 10 to 15 inches high, from *New Zealand*, with three or four times divided (3—4 *pinnatifid*) smooth, pale green fronds, on winged stalks. Very humid. 40° to 65° .

rarum (Br.) A small, densely matted species, from *Tasmania* and *New Zealand*, resembling *H. Tunbridgensis*, but with narrower and less divided (*bi-pinnatifid*) smooth-edged fronds. Humid, but airy. 40° to 65° .

var ? **imbricatum**. Fronds pellucid, and very delicate. Pinnæ overlapping. *Chili*.

scabrum (A. Rich.) A beautiful fern, 12 to 18 inches high, from *New Zealand*, with three or four times divided (*pinnate*) rather hairy fronds, on erect round stalks, which are rough with pale chaffy hairs. Very humid, and rather airy. 40° to 65° .

sericeum (Sw.) A distinct and very fine species, clothing the faces of rocks in the *West Indies*, with sheets of twice divided (*pinnate*) tawny and densely silky pendent fronds, 1 to 2 feet long, and 2 to 3 inches wide. Very humid, but airy. Dislikes water on the fronds. 55° to 75° .

H. Tunbridgense (Sm.) A well known fern, forming dense carpets on moist rocks in many parts of Great Britain and Ireland. Fronds erect, flat, twice divided (*pinnate*) very delicate, serrated at the edges. Stalk wiry. Involucres nearly round, toothed at the top. Very humid, but airy. Dislikes water on the fronds. 40° to 65°.

unilaterale (Willd.) **H. Wilsoni** (Hook.) Another British species, closely allied to the preceding, but differing in its more attenuated fronds, and pinnæ curved to one size, as well as in its inversely pear shaped involucres. Very humid, but airy. 30° to 60°.

valvatum (Hook and Grev.)? A charming species from the *West Indies*, with ovate, attenuated, nearly smooth dark green fronds, 6 to 12 inches long, thrice divided (*tripinnatifid*) and everywhere beautifully undulated. Stalks black, wiry; hairy when young. Very humid, but airy. 50° to 70°.

TRICHOMANES.

achillæifolium (Willd.) A handsome tufted fern, 1 to 1½ feet high, from the *Philippine Islands*, with erect, highly divided, (*quadripinnatifid*) smooth, broadly lanceolate fronds, on tall smooth winged stalks. Very humid and rather close. 60° to 85°.

alatum (Sw.) A fine tufted fern, 9 to 15 inches high, growing on trunks of trees in the *West Indies*. Fronds lanceolate, deep green, rather dense, twice or thrice divided (*sub-tripinnatifid*.) Very humid and rather close atmosphere. 55° to 80°.

anceps (Hook.) A magnificent species, 1½ to 2 feet high, from the *West Indies*, forming tufts of broadly ovate, dark green, nearly smooth, dense, firm fronds, three or four times divided, (*pinnate*) on tall, erect, round, hairy stalks. Very humid and rather close. 55° to 80°.

angustatum (Carm.) A very slender and delicate creeping species from *South America*, having bright green, thrice divided (*pinnate*) smooth fronds on hair like stalks. Pinnules very narrow. Very humid and rather close. 60° to 80°.

attenuatum (Hook.) A most elegant fern, growing on trunks of trees in the *West Indies*. Resembles *T. alatum*, but differs in having shorter, paler, more hairy, translucent fronds, with very attenuated and gracefully drooping ultimate divisions. Easy of culture in a very humid and rather close atmosphere. 55° to 80°.

Bancroftii (Hook) A distinct and pretty species from the *West Indies*, forming star-like tufts of dense, smooth, ovate, semi-pellucid fronds, 3 to 5 inches high, and once or twice divided (*sub-bipinnatifid*.) Stalks short, very broadly winged. Very humid, but airy. 60° to 75°.

Bojeri (Hook.) A very small species, with roundish, or attenuated and crenate fronds, clothing the trunks of palms and tree ferns in the *Mauritius*. Very humid. 60° to 80°.

T. coriaceum (Kunze)? A most lovely fern from the *West Indies*, allied to *T. Bancroftii*, but differing in its larger and excessively crisped and undulated, *thrice* divided (*tri-pinnatifid*) fronds, and much more numerous involucres. Grows among moss and on trees. Slightly humid, and rather airy. 60° to 80°.

crinitum (Sw.) Forms charming tufts of linear-ovate, very glaucous, twice divided (*pinnate*) fronds, covered with soft white hairs. Stalks round, very hairy. *West Indies*. Well drained soil, and slightly humid atmosphere, but dislikes water on the fronds. 50° to 75°.

crispum (Linn.) A handsome and distinct species, 15 to 20 inches high, from the *West Indies*, forming tufts of narrow, glaucous, hairy, once divided (*pinnate*) fronds, on tall round hairy stalks. Pinnæ very blunt, sometimes crowded and beautifully crisped. Very humid, but airy. 55° to 75°

elegans (Rudge.) A very distinct fern from the *West Indies*, forming tufts of very dark green, shining, drooping, *once* divided (*pinnatifid*,) *sterile* fronds, 9 to 12 inches long; and extremely narrow, *undivided* *fertile* fronds on erect stalks in the centre. Very humid and close. 65° to 80°

elongatum (A. Cunn.) A tufted fern, 6 to 12 inches high, from *New Zealand*, with very dense, triangular-ovate, dark green, rigid fronds on erect wiry stems. Very humid. 40° to 65°

exsectum (Kunze.) A most lovely creeping fern, pendent from the roofs of caverns in *Southern Chili*. Fronds extremely delicate and membranaceous, 9 to 12 or 14 inches long, and 5 or 6 inches wide, highly divided (*pinnate*); like thin, flat, much branched, green sea-weed, on slender wiry stalks. Very humid and rather close. 40° to 65°

Filicula (Bory.) A creeping species from the *Mauritius*, with erect, open, rather firm, dark green, smooth, twice divided (*bipinnatifid*) fronds, on winged stalks. Very humid but rather wiry. 65° to 80°

T. fimbriatum. A very beautiful and apparently an *undescribed* species, allied to *T. Kaulfussii*, but differing in its shorter and much broader, ovate, *thrice divided (tripinnatifid)* fronds, the ultimate segments of which are attenuated into *long bristle-like points*. Stalk erect, very broadly winged. *West Indies*. Humid and rather close atmosphere, and very moist soil. 55° to 80°

floribundum (Hook.) A noble and most lovely fern from the *West Indies*, forming tufts 1½ to 2 feet high, and 8 to 10 inches broad, of exquisitely transparent, pale green, once divided (*pinnate*) fronds, beautifully fringed with hair-like receptacles, and attenuated and rooting at the extremity. Stalks round, erect, and hairy when young. Firm clayey soil, thickly mingled with fine sand and a little leaf mould. Very humid, and rather close. 65° to 80°

fœniculaceum (Bory.)? A beautiful species from *Borneo*, with narrow, rigid, rather flat, highly divided, open fronds, with *hair-like pinnales*, and wiry stalks. Very humid but well drained. 55° to 80°.

incisum (Kaulf.) A pendent creeping species from the *West Indies*, with extremely delicate, transparent, twice divided, (*bipinnatifid*) ovate fronds, 3 to 4 inches long, margined with star-like tufts of hairs. Very humid, but rather airy.

Javanicum (Bl.) A fine tufted species from *Java* and the *Philippine Islands*, with smooth, dark green, glossy, erect, once divided (*pinnate*) fronds, 8 to 12 inches high, on round hairy stalks. Very humid, and rather close. 65° to 85°.

Kaulfussii (Hook.) An erect and handsome species, 9 to 18 inches high, from the *West Indies*, with narrow, rather hairy, dull green, once or twice divided (*sub-bipinnatifid*) fronds, on broadly winged hairy stalks. Very moist firm soil, and humid rather close atmosphere. 65° to 85°.

Kraussii (Hook.) A small creeping fern from the *West Indies* with oblong, once or twice divided (*sub-bipinnatifid*) fronds. On trunks of trees. Humid but airy. 50° to 75°.

T. Luschnatianum (Pr.) A very handsome climbing fern from *Brazil*, allied to *T. radicans*, but differs in having nearly or quite sessile, lanceolate fronds $1\frac{1}{2}$ feet long, and a very long, slender, round and nearly smooth creeping caudex. One of our plants when received was 15 feet long! Humid but rather airy. 55° to 75° .

membranaceum (Linn.) A very distinct and interesting creeping fern, from the *West Indies*, forming round or obovate, nearly or quite stemless, deep green, glossy fronds, 2 to 3 inches long, and sometimes as much in width; entire, incised, or torn at the edges, and with fan-like veins. Very humid and rather close. 65° to 80° .

muscoïdes (Sw.) A delicate sea-weed-like creeping fern from the *West Indies* forming dense mats of *undivided*, or deeply waved, blunt, translucent, bright green, nearly stemless fronds, $1\frac{1}{2}$ to $2\frac{1}{2}$ inches high, with a central vein. Humid and rather close. 65° to 85° .

Pluma (Hook.) A very rare and beautiful fern from *Borneo*, with erect, rigid, highly divided (3—4 *pinnate*), fronds, 9 to 15 inches high, *of which all the divisions are hair-like*. Stalks wiry. Among decayed logs and moss. Very humid. 50° to 70° .

punctatum (Poir.) Smaller than *T. muscoïdes*, and with roundish, obovate, bluntly incised fronds, having fan-like veins. Very humid, but rather airy. 60° to 80° .

pusillum (Sw.) A minute *West Indian* species, creeping on the stems of palms, &c., with oblong or wedge shaped, lobed fronds tapering into very short stalks. 55° to 75° .

pyxidiferum (Linn.) A creeping fern, variable in form, from the *West Indies*, with twice divided (*bipinnatifid*) smooth, firm, and rather flat fronds, 3 to 6 inches high. On trunks of palms, &c. Humid and rather close. 55° to 75°

var. gracile. Half the size, more divided, thin, and with pinnules curving to one side.

radicans (Sw.) **T. speciosum** (Willd.) *The "Killarney Fern."* A beautiful species, creeping on moist rocks in the south-west of Ireland, Madeira, &c. First? found in Yorkshire! Frond triangular-ovate, dark green, highly divided (3—4 *pinnatifid*), on tall hairy stalks. Shady and very humid. 40° to 70° .

T. radicans, var. Andrewsii. Fronds lanceolate. Fruits freely.

reniforme (Forst.) A very distinct creeping species from *New Zealand*, with *nearly round, undivided*, dark green, beautifully veined fronds, heart-shaped at the base, and 4 to 5 inches broad, on tall wiry stalks. Very humid, but rather airy. 40° to 70°.

reptans (Sw.) A very minute species, creeping on palms, &c. in the *West Indies*, with roundish or wedge-shaped, more or less incised fronds, having fan-shaped veins. Very humid. 55° to 80°.

rhomboideum (Cuming.) A remarkable species, 9 to 12 inches high, from the *Philippine Islands*, with narrow, nearly smooth, once divided (*pinnate*) fronds, with a blunt robe at the upper base of each division; allied to *T. Javanicum*, but evidently distinct, having much paler fronds, and fewer, broader, more distant and very blunt (*truncate*), entire pinnæ, which in cultivation *uncurl* in a totally different manner. Very humid. 65° to 85°.

rigidum (Sw.) A fine tufted fern, 9 to 12 inches high, from the *West Indies*, &c., with broadly ovate, rigid, dark green, three or 4 times divided (*bipinnate*) fronds, on erect round wiry stalks. Very humid but airy. 55° to 80°. The typical form has nearly flat and rather dense fronds.

var. diaphanum. Frond lanceolate, translucent, crisped, paler green, 12 to 14 inches high.

var. pulchellum. Frond lanceolate, very dark green, beautifully crisped and very finely divided into *hair-like segments*, 6 to 9 inches.

rupestre. A new species from *Borneo*, forming tufts of broadly ovate, dense, rather undulate, thrice divided (*pinnate*) fronds, on round hairy stalks. On bare wet rocks. 70° to 80°.

scandens (Linn.) A lovely and delicate fern, 15 to 18 inches long, from the *West Indies*, with slender, ovate, attenuated, four times divided (*bipinnate*), curving fronds, of a very pale green. Stalks long wiry. Creeps on tree ferns and palms. Humid, but airy. 50° to 70°.

setigerum. A new, undescribed, (?) and beautiful species from *Borneo*, allied to *T. Pluma*, but larger, *tufted*, curving, less divided, and having only the ultimate divisions of the pinnæ hair-like (giving a brush-like appearance to the fronds.) Crevices of rocks. Humid, well drained, but slightly shaded, 70° to 80°.

T. sinuosum (Rich.) An extremely delicate pendent species, climbing on trees in the *West Indies*, with slightly divided (*pinna-tifid*), pale green, pellucid fronds, narrowing into very short winged stalks. Lobes blunt, hairy at the margin. Very humid and rather close. 50° to 75°.

speciosum (Willd.) see *T. radicans*.

spicatum (Hedw.) Resembles *T. elegans*, but smaller in all its parts. Fronds 3 to 6 inches high, and with narrower pinnules. Fertile fronds on separate stalks. Involucres unconnected. *West Indies*. Very humid, but rather airy. 55° to 75°.

superbum. An undescribed and most noble species from *Borneo*, "2 to 3 feet high" with dense, triangular, thrice divided (*tripinnatifid*) fronds, on erect, *broadly winged and very hairy stalks*. Shady and very humid. 70° to 85°.

thujoides (Desv.) A handsome tufted species, 9 to 18 inches high, from the *Mauritius*, with ovate attenuated, thrice divided (*tripinnatifid*) fronds on erect round stalks, hairy at the base and winged above. Very humid and rather close. 60° to 85°.

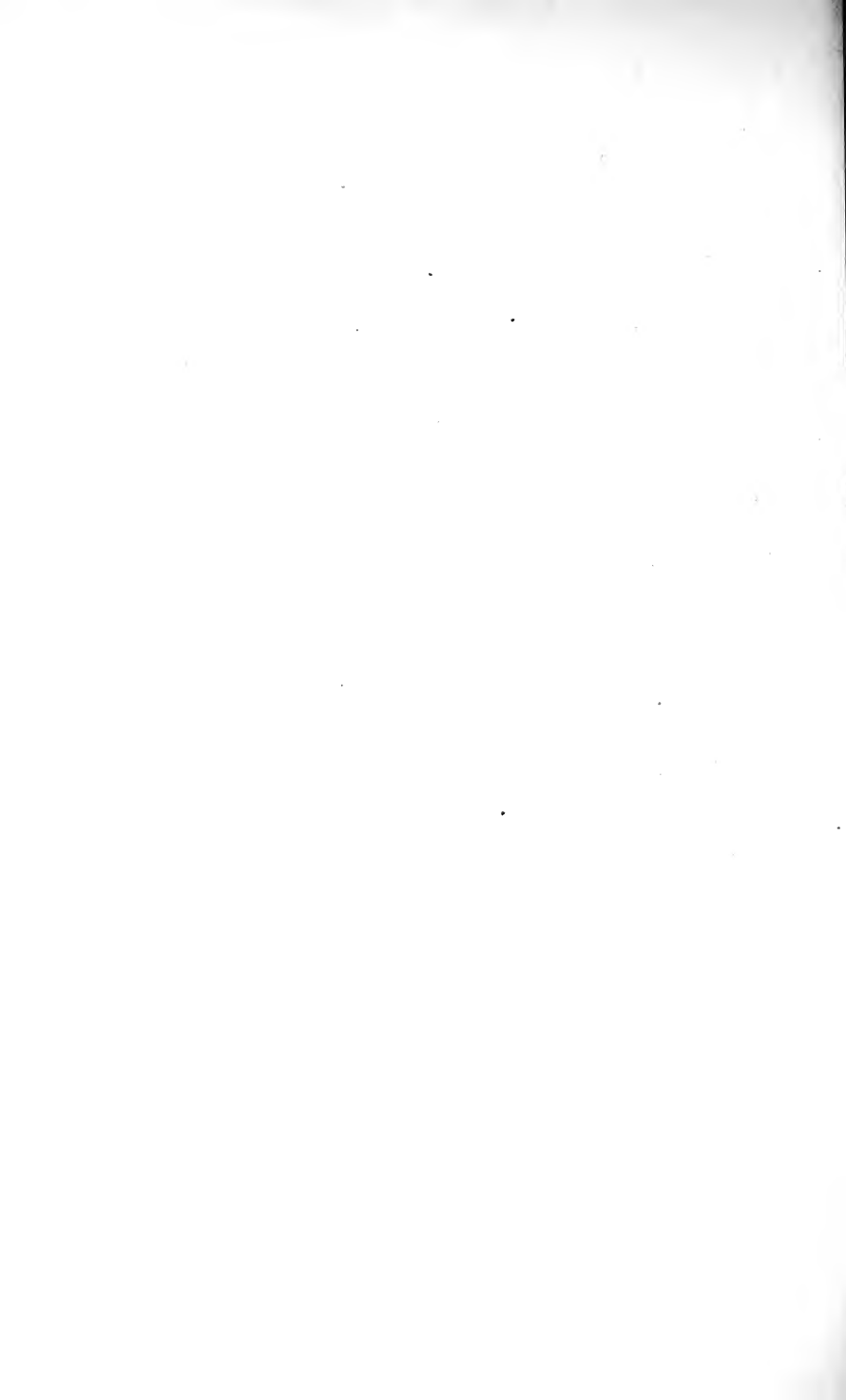
trichoideum (Sw.) An extremely delicate creeping species, from the *West Indies*, like the finest hair-like seaweed, forming thrice divided (*tripinnate*), sub-cylindrical fronds, 6 to 10 inches high. Very humid and rather close. 55° to 80°.

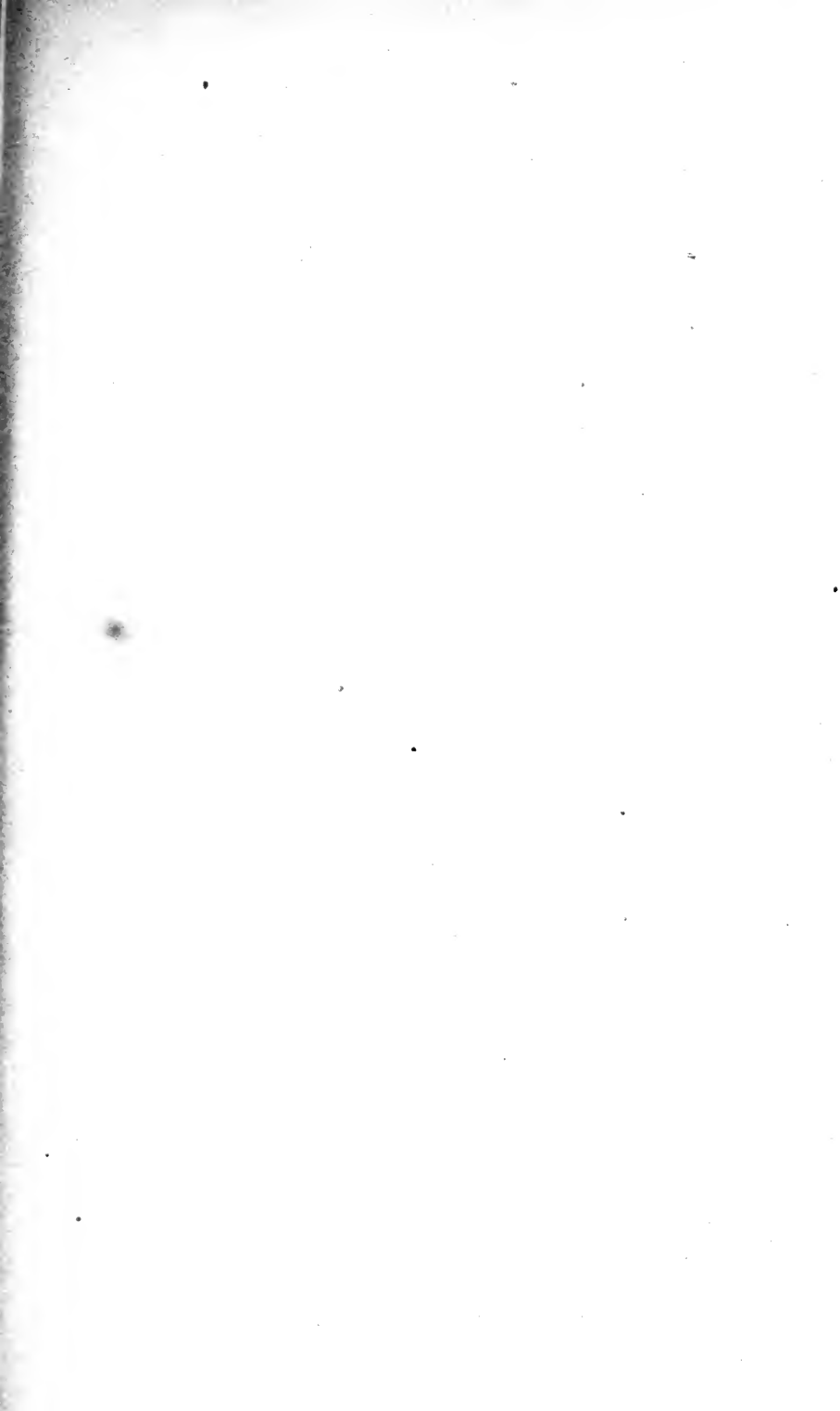
venosum (Br.) A pretty little fern, 3 to 5 inches high, carpeting the trunks of tree ferns in *Tasmania* and *New Zealand* with slender, densely matted, glistening, once divided (*pinnate*) fronds, having blunt and undulated pinnules. Very humid but rather airy. 40° to 65°.

sp. from Borneo. Resembles *T. elongatum*, but too young yet to determine, and scarcely likely to prove identical with a native of *New Zealand*. Very humid. 70° to 80°.

A General Catalogue of FERNS and ORCHIDACEÆ

CAN ALSO BE SUPPLIED.





DUBLIN
26
1860